

REVISION OF THE AMYCTERIDES.

Part ii. *Talaurinus*.

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(Plates ii.-iii.)

TALAUINUS Macleay.

Macleay, Trans. Ent. Soc. N. S. Wales, i., 216, 1865.

♂. Form elongate or elliptical ovate, convex, clothing variable; setigerous. Head convex, forehead convex, flattened or concave. Rostrum, as a rule, rather narrower than head, may be separated by a transverse sulcus, or continuous in same plane; internal ridges typically long, convergent, may be short or obsolete. Prothorax granulate or tuberculate, never strongly produced over head. Elytra granulate, tuberculate, costate or foveate. Ventral segments, as a rule, longer than in *Psalidura*; apical ventral segment generally with a shallow excavation varying in degree and shape. Apices of forceps occasionally visible at sides, as a rule entirely concealed.

♀. More robust and elliptical in shape; beneath convex, apical ventral segment not excavate.

In the formation of this genus, for the inclusion of "a very large number of species of all grades of transition between the last genus, *Psalidura*, and the following one, *Sclerorrhinus*," Macleay relied chiefly on the anal scissors-like appendages of the male being absent, and on the formation of the rostrum, "generally in this genus longer and rather narrower than the head, with elevated sides, excavated middle, and two oblique ridges nearly meeting behind." In his paper, however, Macleay has placed, under *Talaurinus*, many species which do not fulfil these requirements; at the same time, it must be admitted that, on the whole, they form a natural group, though one for which it seems almost impossible to formulate constant characters.

In regard to the long anal forceps of the male, which must remain the main distinctive character of *Psalidura*, dissection of a typical *Talaurinus* discloses the fact that these organs are present, but more or less membranous and rudimentary, the component parts being more or less continuous. In certain species, however, the blades of the forceps are more strongly developed, are chitinous, and their apices protrude at each side of the anal excavation. Also in a few species, e.g., *T. M-elevatus* Lea, the ends of the forceps, though joined together by membrane, are separated by the intervention of a chitinous vertical plate, as in *Psalidura*. If we try to separate off such species, we find that they merge, by almost imperceptible degrees, into others possessing normal structure. The same remark applies with equal force to the rostral characters. Macleay regarded the rostrum in such species as *T. typicus* and *T. alternans* as typical of the genus. Its chief characters are given above, but I should add that the external ridges are continued back along the forehead, and the forehead itself is concave at the base of the rostrum. Comparatively few species, however, have the rostrum so formed, though the main features are always traceable, with the exception of the internal rostral ridges; these may be entirely obsolete, as in *T. verrucosus*, where, however, the median area is depressed, and in no way raised or carinate as in *Sclerorrhinus*. In other species, the rostrum is shorter, and approaches more nearly to that characteristic of *Psalidura*. Other more aberrant forms of rostra have led to the separation, from the genus, of the genera *Notonophes*, *Sclerorrhinella*, *Lataurinus*, etc.

The prothorax is variable in shape and granulation, and lacks the ampliate form, anteriorly produced over the head, that is found in most species of *Psalidura*.

The elytra present the widest degree of difference in sculpture, and Macleay has utilised this feature for dividing the group into sections: *Granulati*, *Tuberculati*, *Costati*, *Foveati* and *Echinati*. While, for convenience, I have retained most of these divisions, I believe they cannot be rigidly adhered to, some species showing structure that might refer them to two or more groups. Macleay regarded the sections *Tuberculati* and *Costati* as typical, *Granu-*

lati as allied to *Psalidura*, and *Foveati* and *Echinati* as aberrant. Most of the species assigned to *Echinati* have been transferred to *Notonophes*; while, of the two remaining species, I have taken *T. Manglesi* as the type of the new genus *Sclerorrhinella*; and *T. incanescens* might well be referred to the section *Tuberculati*. Three species have been referred to the section *Foveati*, two of which I would relegate to new genera; and the third (*T. angustatus*) will, I believe, be ultimately removed also.

In Masters' "Catalogue of the Described Coleoptera of Australia" (Part v., 1886), appear the names of eighty-three species of *Talaurinus*, and two as synonyms; also in *Psalidura*, two, probably three, that belong to *Talaurinus*.

In forming the genus, Macleay relegated to it fourteen species previously described by Olivier(1), Guérin(1), Boisduval(4), W. S. Macleay(1), and Bohemann(7).

T. bucephalus Olivier, Ent. v. No.83, p.399, 1807.—The identity of this insect is clear from the figure given by Olivier; it is a common and much-named New South Wales species.

T. Kirbyi W. S. Macleay, King's Survey, ii., 1827.—This name must replace *T. costatus* Boisd., and *T. Mastersi* Macl.

Guérin (Voy. Coquille, ii.(2), 1830, p.120), described two species which should, I think, be referred to *Talaurinus*—*verrucosus* and *granosus*, the latter name appearing in Masters' Catalogue under *Psalidura*. *T. verrucosus* I have elsewhere redescribed.*

Four of the species described by Boisduval (Voy. Astrolabe, ii., 1835) appear under *Talaurinus* in Masters' Catalogue—*T. costatus*, *T. morbillosus*, *T. rugifer*, and *T. tomentosus*—and two under *Psalidura*—*T. scaber* and *T. tuberculatus*.

Of Bohemann's species (Schönh., Gen. Curc. vii.(1) 1843), Masters includes seven—*T. excavatus*, *T. hystricosus*, *T. Manglesi*, *T. pastillarius*, *T. Roei*, *T. semispinosus*, and *T. Westwoodi*. Of these, *T. excavatus* is probably synonymous with *T. rugifer* Boisd.; *T. Manglesi* belongs to a new genus, I have called *Sclerorrhinella*; and *T. Westwoodi*, I cannot certainly identify. The names *pastillarius*, *Roei*, and *semispinosus* are applied, in Australian

* These Proceedings, 1911, p.148.

collections, to West Australian species of the type of *T. pustulatus* Pasc.; but, in all three cases, the species, to which the name is applied, is not always the same, but differs in the different collections. Furthermore, I have seen specimens belonging to the British Museum, and marked "*T. Roei*, compared with type," which represent a quite different species from any so named in Australian collections. The descriptions, though lengthy, would fit several species, and no dimensions are given. Under the circumstances, I have thought it impossible at present to determine the species definitely, and have left undescribed several belonging to the same group, until Bohemann's types can be examined. *T. hystricosus* should be referred, judging from the description, to the same genus as *Notonophes spinosus* Macl., if, indeed, these names are not synonymous.

Erichson (Wieg. Arch. i., 1842), published the descriptions of two new species of *Amycterus*, both of which were overlooked by Macleay in his paper. Of these two, I have a species which is apparently *T. exasperatus*; while *T. morbillosus* is a preoccupied name, and, I believe, correctly placed in Masters' Catalogue as a synonym of *T. penicillatus* Macl.

Macleay (Trans. Ent. Soc. N. S. Wales, i., 1865) described, as new, forty-six species, and divided the genus into five sections. Subsequently (Trans. Ent. Soc. N. S. Wales, i, 1866) he added five new species. Of these fifty-one species, I have been able to examine the types of all except, possibly, *T. spherulatus*; but as, in many cases, the species is represented in both the Australian and Macleay Museum Collections, and as the types are unmarked, it follows that it is impossible to say which were the types; and, in all such doubtful cases, I have redescribed the Macleay Museum specimens. *T. aberrans* is synonymous with *T. scaber* Boisd.; *T. amycteroides* with *T. catenulatus*; *T. Camdenensis*, *T. Murrumbidgeensis*, *T. rudis*, *T. rugosus*, *T. salebrosus* with *T. bucephalus* Oliv.; *T. hiscipennis* with *T. impressicollis*; *T. muricatus* (var.) as well as *T. encaustus* Pasc., and *T. Macleayi* Pasc., (var. = *muricatus*) with *T. incanescens*; *T. Mastersi* with *T. Kirbyi* W. S. Macl.; *T. maculatus* with *T. Riverinæ*; *T. nodulosus* with *T. humeralis*; *T. Victorie* with *T. Howitti*, *T. Howitti*

Macl., appears, in Masters' Catalogue, as a synonym of *T. exasperatus* Erichs., but it is a good species. *T. dubius*, I regard as a variety of *T. ambiguus*, and consider it likely that both *T. ambiguus* and *T. Rayneri* will be eventually removed from *Talaurinus*, and formed into a new genus. *T. spinosus* and *T. dumosus* have been placed in *Notonophes* by Lea, while I propose to form new genera or subgenera for the reception of *T. laticeps*, *T. rugiceps*, and *T. Dameli*. *T. scaber* Macl., is preoccupied by *T. scaber* Boisd., and I propose the name *T. scabricollis* for Macleay's species; *T. tuberculatus* Macl., appears also to be preoccupied by *T. tuberculatus* Boisd., but as the latter name is a synonym of *T. verrucosus* Guér., I do not propose to alter the name of Macleay's species. *T. morbillosus* Boisd., was wrongly identified by Macleay, and I would propose *T. tenebricosus* as a substitute for *T. morbillosus* Macl.(*nec* Boisd.). *T. incertus* is a female *Psolidura*, and is synonymous with *P. forficulata* Macl.

Pascoe (Journ. Linn. Soc., xii., 1873) added the names of eighteen species of *Talaurinus*, of most of which I have had an opportunity of examining cotypes or specimens compared with the types, and would note the following synonyms. *T. cariosus* is synonymous with *T. Dameli* Macl.; *T. encaustus* and *T. macleayi* (var.) with *T. incanescens* Macl.; *T. pupa* with *Notonophes dumosus* Macl.; *T. tenuipes* with *T. spinosus* Macl.; *T. victor* with *T. caviceps* Macl. *T. lemmus* has been placed by Lea in *Notonophes*. I am inclined to question both *T. lemmus* and *T. dumosus* being congeneric with *N. cichlodes* Pasc., but as they certainly should not be allowed to remain in *Talaurinus*, I am content to leave them where Lea has placed them, for the present. I regard also *N. spinosus* as generically distinct from *N. cichlodes*, as well as from *N. lemmus* and *N. pupa*, but am not yet prepared to state its exact position. *T. molossus* is a species of *Sclerorrhinus*, while I would refer *T. geniculatus* and *T. melanopsis* to *Sclerorrhinella*. A specimen referred to me, marked compared with type of *Scl. echinops*, belonged to the same species as another labelled *T. simulator*. *T. phrynos* and *T. carbonarius* are unknown to me.

Sloane (Trans. Roy. Soc. South Aust., xvi., pp.215-225), in describing the *Amycterini* of the Elder Exploring Expedition, proposed nine new species. Of these, I know *T. regularis*, *T. solidus*, *T. Helmsi*, *T. aequalis*, and *T. convexus*; the latter species, however, was later on referred by Blackburn to *Sclerorrhinus*. *T. crassiceps*, *T. obscurus*, *T. noctis* and *T. insignis* I have never seen, but, from the descriptions, they should be very distinct from any others of the genus, and probably will not always remain in *Talaurinus*. The *Amycterid* fauna of the Central Australian Region is, as yet, little known, such species as have been described having, as a rule, no great affinity to the species found in the Eastern States; but, until more is known about the species peculiar to this region, it seems useless and mischievous to propose genera on isolated specimens, and better at present to relegate them to the old-established genera.

Blackburn (Report Horn Exped. Central Australia, ii., 1896) described three species—*T. inaequalis*, *T. rufipes* and *T. imitator*. *T. inaequalis* I have not seen, but I have specimens of *T. rufipes* and *T. imitator*, and to them also would apply the above remarks. I have endeavoured to work them and Sloane's species into my Table, but the places assigned to them must be regarded as only tentative.

T. rufipes, in some respects, shows an approach to *Psolidura*, or to the *T. Riverinæ*-group, in that the apices of the forceps appear at the sides of the anal segment, though the latter is not greatly excavate; the basal ends of the forceps, however, appear on dissection, as far as such could be performed, to be separated by a median vertical plate, as in *Psolidura*. *T. imitator* differs rather widely from the typical *Talaurini* in the structure of the rostrum.

T. strangulatus Blackb., (Trans. Roy. Soc. South Aust., xix., 1895) appears to be a very distinct species; it is unknown to me.

Lea has recently described, in various journals, six new species of *Talaurinus*—*T. cavirostris*, *T. maculipennis*, *T. M-elevatus*, *T. melancholicus*, *T. simplicipes* in the Mém. Soc. Ent Belgique, xvii., 1910; and *T. orthodoxus* in the Deutsch. Ent. Zeitschr., 1910.

Thanks to Mr. Lea's kindness, I have had an opportunity of examining the types of these: *T. maculipennis* and *T. simplicipes* belonging to the *T. Riverinae*-group. *T. M-elevatus*, *T. melancholicus* and *T. orthodoxus* to the *T. morbillosus*-group. *T. cavirostris* is congeneric with *T. Dameli* Macl., and I would propose the genus *Dicherotropis* to receive them.

Thus, of the eighty-seven species and synonyms listed in Masters' Catalogue, the names of twenty-two must be regarded as synonyms, fourteen are removed to other genera, and the name of one is preoccupied, leaving a total of fifty species. To this number, eighteen species have been added in recent years, two of which have since been removed from the genus; and I would add also the name of one described as a *Sclerorrhinus*, *S. multigranulatus* Lea, (Deutsch. Ent. Zeitschr., 1910). In the present paper, I propose the names of thirty-three as new, making a total of one hundred species in the genus. Of these, I have examined the types or seen authentic specimens of all except twelve.

That this number, large as it is, will be greatly increased, I feel certain, on account of the many species which have passed under my review, but which, for various reasons, it has been impossible to describe.

SYNONYMY.

T. ambiguus Macl., var. ... = *T. dubius* Macl.

T. bucephalus Oliv.... .. = *T. Camdenensis* Macl.,
T. Murrumbidgeensis Macl.
T. rudis Macl.,
T. rugosus Macl.,
T. salebrosus Macl.

T. catenlatus Macl. = *T. amycteroides* Macl.

T. caviceps Macl. = *T. victor* Pasc.

T. Howitti Macl.... .. = *T. Victoriae* Macl.

T. humeralis Macl. = *T. nodulosus* Macl.

T. impressicollis Macl.... .. = *T. hiscipennis* Macl.

T. incanescens Macl. = *T. encaustus* Pasc.

var.... = *T. muricatus* Macl.,

var.... = *T. Macleayi* Pasc.,



6. (7) Prothorax with granules distinct, not entirely obscured by clothing *T. Riverina* Macl.
7. (6) Prothoracic granules less distinct, obscured by clothing, and depressed *T. exasperatus* Er.
8. (5) Form narrow, more elongate, relatively less ampliate.
9. (10) Clothing uniformly dark *T. tenebricosus*, n.sp.
10. (9) Clothing lighter, prothorax trivittate, elytra maculate.
11. (12) Elytral striae with ridges between foveae setigerous
... .. *T. tomentosus* Boisd.
12. (11) Ridges between foveae hardly, or much less definitely setigerous... .. *T. penicillatus* Macl.
13. (4) Anal excavation without transverse sulcus along posterior edge of segment.
14. (15) Anal excavation not hirsute *T. panduriformis* n.sp.
15. (14) Anal excavation with stout hair or bristles.
16. (17) Hair dark brown *T. apici-hirtus*, n.sp.
17. (16) Hair bright reddish... .. var. *haemorrhoidalis*, n.var.
18. (3) Anal excavation with a small tubercle on either side.
19. (22) Tibiae without subapical notch.
20. (21) Anal excavation transverse *T. simplicipes* Lea.
21. (20) Anal excavation subquadrate *T. Horvitti* Macl.
22. (19) Intermediate tibiae with a strong subapical notch
... .. *T. maculipennis* Lea.
23. (2) Anal segment with, at most, a slight impression.
24. (27) Intermediate tibiae notched.
25. (26) Clothing mainly dark... .. *T. septentrionalis*, n.sp.
26. (25) Clothing mainly light, greyish *T. Carpentariae*, n.sp.
27. (24) Intermediate tibiae not notched.
28. (31) Antennal scape not greatly dilatate, ventral median vitta present.
29. (30) Metasternum tuberculate on either side... ..
... .. *T. pulverulentus* Macl.
30. (29) Metasternum without tubercles *T. parvus*, n.sp.
31. (28) Scape widely dilatate and incrassate.
32. (33) Metasternum and first two ventral segments sulcate
... .. *T. sulciventris*, n.sp.
33. (32) Metasternum and segments not sulcate, prothorax with pavement-like granules *T. clavicornis*, n.sp.
34. (1) Internal rostral ridges obsolete, anal segment with wide shallow excavation.
35. (38) Second elytral interstice granulate to apex.
36. (37) Rostrum densely clothed along sides of median area
... .. *T. tessellatus* Pasc.
37. (36) Rostrum less densely clothed... .. *T. (Scl.) multigranulatus* Lea.

38. (35)Granules of second interstice stopping at declivity, fewer in number and separated... .. *T. Roei* Bohem. (?)
- Group ii.—Small, narrow; external ridges subparallel, prothorax not sulcate, at most feebly impressed, elytra with third and fifth interstices more evidently raised, no median ventral vitta present.
39. (40)Clothing, dense, greyish, vittate *T. squamosus* Macl.
40. (39)Clothing much more scanty.
41. (42)Head with groove at base of rostrum; second and fourth interstices with a row of small setæ *T. inconspicuus*, n.sp.
42. (41)Head not grooved, setæ on intermediate interstices not traceable *T. Megalongensis*, n.sp.
- Group. iii.—Form larger, more oblongate; median area of rostrum briefly carinate, internal ridges short; second and fourth interstices not raised; anal segment not excavate, but apices of forceps appearing at sides.
43. (44)Second and fourth elytral interstices with fine distant granules in the male... .. *T. variegatus* Macl.
44. (43)Such granules absent var. *Darlingensis*, n. var
- Group iv.—Species moderately small; rostrum rather narrower than head, external ridges convergent towards base, but not continued along forehead, median area depressed throughout; prothorax longitudinally impressed in most species.
45. (54)Humeral angles strongly produced, elytra ampliate posteriorly.
46. (53)Anal segment with excavation as in *T. humeralis*.
47. (50)Clothing without circumscribed patches.
48. (49)Granules small, but prominent and subnitid
... .. *T. humeralis* Macl.
49. (48)Granules more obscure, little evident... .. *T. euomoides* Macl.
50. (47)Clothing dense, with circumscribed felt-like patches.
51. (52)Prothoracic granules distinct, not confluent
... .. *T. scapularis*, n.sp.
52. (51)Prothoracic granules confluent along either side of median line *T. acromialis*, n.sp.
53. (46)Anal excavation simple; prothorax not sulcate
... .. *T. angularis*, n.sp.
54. (45)Humeral angles marked but not strongly produced.
55. (60)Elytra without isolated felt-like patches.
56. (57)Elytral granules fine, distant, scattered over elytra
... .. *T. griseus* Macl.
57. (56)Granules coarser, sculpture much more confused.

58. (59)Clothing greyish, feebly maculate on elytra.

... .. *T. papulosus* Macl.

59. (58)Clothing uniform, yellow *T. vermicollis*, n.sp.

60. (55)Elytra with circumscribed felt-like patches....*T. Illidgei*, n.sp.

Group v.—Size moderate, form oblongate; elytra with rows of small punctiform depressions, each attended by a small granule, interstices with small non-elevated granules or tubercles, granules on fifth diminishing in size from the humeral angle posteriorly.

61. (64)Intermediate tibiæ with strong subapical notch.

62. (63)Internal rostral ridges strongly developed

... .. *T. pallidus* Macl.

63. (62)Internal ridges almost obsolete... .. *T. Gaydahensis*, n.sp.

64. (61)Intermediate tibiæ without subapical notch.

65. (66)Clothing dense... .. *T. sphaerulatus* Macl.

66. (65)Clothing more or less absent *T. parallelus* Macl.

Group vi.—Rostrum not excavate save for subapical groove, base trifoveate... .. *T. imitator* Bl.

Section B. : Tuberculati.—Elytra with interstices coarsely granulate, or tuberculate.

Group vii.—Elytral tubercles more or less rounded, rarely conical; rostrum moderately long, external ridges continued along head, internal long, convergent; anterior femora not ridged.

67. (86)Elytra with third interstice granulate or tuberculate, not costate.

68. (69)All interstices with tubercles much of the same size, though more numerous on alternate ones; size large, robust... ..

... .. *T. caviceps* Macl.

69. (68)Third and fifth interstices less coarsely but more closely tuberculate than second and fourth.

70. (83)Internal rostral ridges raised, prominent.

71. (80)Elytra not strongly nor definitely foveate.

72. (77)Third elytral interstice tuberculate in single series.

73. (76)Tubercles on third and fifth small, rounded; on second and fourth larger, almost conical.

74. (75)Prothorax evenly granulate *T. typicus* Macl.

75. (74)Prothorax irregularly set with larger granules and areas free from granules *T. Mitchelli* Macl.

76. (73)Tubercles on third and fifth tending to become obsolete, and fewer in number on second and fourth... .. *T. longipes*, n.sp.

77. (72)Third interstice granulate in more than single series.

78. (79)Fifth granulate in single series, third in double series in basal half *T. alternans* Macl.

79. (78)Fifth granulate in double series, third biseriate becoming multiseriate in parts *T. miliaris*, n.sp.
80. (71)Elytral striæ strongly and definitely foveate.
81. (82)Prothoracic granules small, not contiguous
T. acutipennis, n.sp.
82. (81)Prothoracic granules fine, more evenly and closely placed, prothorax relatively much more robust
T. foveogranulatus, n.sp.
83. (70)Internal ridges less elevated, almost obsolete, but strongly convergent.
84. (85)Prothorax with granules confluent, elytra with few sub-conical tubercles *T. tumulosus*, n.sp.
85. (84)Prothoracic granules not confluent, but leaving median and lateral areas bare of granules; elytra with elongate flattened tubercles *T. catenulatus* Macl.
86. (67) Third elytral interstice costate.
87. (88)Prothorax with small granules, fifth interstice present... ..
T. alternatus Macl.
88. (87)Prothoracic granules confluent, fifth interstice obsolete.....
T. rugicollis Macl.
- Group viii.—Elytral tubercles, as a rule, conical and larger; rostrum with internal ridges less prominent, often obsolete.
89. (94)Internal ridges definite though little prominent.
90. (93)Anterior femora with a ridge beneath along outer half.
91. (92)Elytra practically devoid of clothing ... *T. bucephalus*, Oliv.
92. (91)Elytra maculate or subvittate with white
T. subvittatus, n.sp.
93. (90)Anterior femora not ridged, tubercles much smaller
T. sobrius, n.sp.
94. (89)Internal rostral ridges obsolete.
95. (100)Anal excavation in two portions, with a tubercle on each side in middle of segment.
96. (99)Tubercles strong, conical.
97. (98)Clothing practically absent *T. verrucosus*, Guér
98. (97)Clothing dense, greyish *T. scabrosus* Macl.
99. (96)Tubercles smaller, more numerous. *T. irroratus*, n.sp.
100. (95)Anal excavation deep, but not as described above, clothing variegate *T. tuberculatus* Macl.

Group ix.—Rostrum shorter than in the last Group, excavate, internal ridges obsolete, median area lævigata, not raised, anterior femora ridged beneath.

Includes—*T. semispinosus* Bohem., *T. pastillarius* Bohem., *T. funereus* Pasc., *T. pustulatus* Pasc., *T. simulator* Pasc.

Group x.—Size small, elytra with strong tubercles on third and fifth interstices, few or none on second, fourth and sixth; internal ridges short, prominent.

101. (102) Granules subtending stria punctures definite
 *T. incanescens* Macl.
 102. (101) Such granules hardly, if at all, traceable
 var. *muricatus* Macl.

Group xi.—Size small, clothing dense, internal rostral ridges more prominent than external, prothorax dilated and angulate in middle on sides; elytra with tubercles hardly traceable, except along edge of declivity *T. scaber* Boisd.

Group xii.—Size large or moderately large; rostrum very short, elytral sculpture of small tubercles or coarse granules more or less regularly disposed.

103. (110) Internal ridges obsolete.
 104. (107) Elytral granules comparatively equal in all interstices.
 105. (106) Size large *T. aequalis* Sl.
 106. (105) Size moderate *T. Helmsi* Sl.
 107. (104) Elytral granules on third interstice duplicated, rather smaller, and more numerous than on second and fourth.
 108. (109) Granules on second interstice separated by intervals nearly equal to the length of a granule... .. *T. solidus* Sl.
 109. (108) Granules closer together, rather smaller... *T. regularis* Sl.
 110. (103) Internal ridges present, though not prominent, tibiae notched *T. rufipes* Bl.

Group xiii.—Species moderate in size, but of a short stout form, with apex of elytra strongly rounded, apex of abdomen excavate, with a small tubercle on either side.

111. (116) Third elytral interstice granulate or tuberculate.
 112. (115) Second interstice tuberculate.
 113. (114) Abdominal tubercles nearer to sides than to each other...
 *T. morbillosus* Boisd.
 114. (113) Abdominal tubercles equidistant from sides and each other *T. orthodoxus* Lea.
 115. (112) Second interstice not tuberculate... .. *T. M-elevatus* Lea.
 116. (111) Third elytral interstice subcostate at base
 *T. melancholicus* Lea.

Section C.: Costati.—Elytra costate, each elytron having four distinct costæ (including suture), striæ foveate.

Group xiv.—Species large, sublateral stria consisting of a double row of foveæ.

117. (130)Elytral foveæ deep, subquadrate.
 118. (123)Prothorax with granules separate, discrete.
 119. (120)Anterior femora armed with spine near middle or base in
 δ ... *T. rugifer* Boisd., *T. excavatus* Bohem., *T. simillimus*
 Macl.
 120. (119)Anterior femora unarmed in δ .
 121. (122)Elytral foveæ in each series, as a rule, not communicating
 with foveæ of other series in the same stria...*T. foveatus* Macl.
 122. (121)Adjacent foveæ in same stria communicating laterally ...
 *T. lacunosus* Macl.
 123. (118)Prothoracic granules showing a tendency, more or less, to
 become confluent.
 124. (127)Elytra and prothorax not densely clothed.
 125. (126)Prothoracic granules depressed, confluence confined to a
 few of the central ones, sculpture regular, insect subnitid ...
 *T. fossulatus*, n.sp.
 126. (125)Prothoracic granules much more confluent, elytral sculp-
 ture more irregular, insect more opaque...*T. scabricollis*, n.sp.
 127. (124)Elytra and prothorax with dense white clothing in depres-
 sions and striæ.
 128. (129)Median line of prothorax reaching to anterior border ...
 *T. niveovittatus* n.sp.
 129. (128)Median line separated from anterior margin by a nodu-
 lose elevation *T. Carteri*, n.sp.
 130. (117)Elytral striæ with double series of small, almost obsolete
 cross-rugations *T. impressicollis* Macl.

Group xv.—Species smaller; sublateral stria in single, the others
 in double, series

131. (134)Elytra closely set with small cross-rugations.
 132. (133)Prothoracic granules small *T. Kirbyi* Macl.
 133. (132)Prothoracic granules very fine *T. costipennis*, n.sp.
 134. (131)Elytra deeply foveate, prothorax lævigata
 *T. lævicollis* Pasc.

Group xvi.—Rostrum as in Group iv., elytra foveate, alternate
 interstices more prominent.

135. (136)Interstices (third and fifth) costiform, undulate
 *T. crenulatus*, n.sp.
 136. (135)Interstices tending to become granulate or nodulose.
 137. (138)Prothoracic granules more or less separate
 *T. forcipennis*, n.sp.
 138. (137)Prothoracic granules continuous along each side of median
 sulcus *T. mythitoides*, n.sp.

Group xvii.—Anomalous Species.

Section Foveati: Size moderate, ♂ subcylindrical, ♀ more ovate; rostrum little excavate, not greatly dilated on sides, internal ridges subparallel. Eyes set well down on head. Scrobes curved. Elytra foveate *T. angustatus* Macl.

Group xviii.—Size small; rostrum not dilatate, eyes set high in head, scrobes straight. Elytra with small foveiform punctures, interstices not raised *T. prypnoides*, n.sp.

Group xix.—Size moderate; rostrum narrow across ridges, widely dilatate on sides. Eyes round, set low. Scrobes curved *T. capito*, Pasc.

Group xx.—Size large; rostrum hardly excavate; prothorax very finely granulate; tibiæ, especially posterior, strongly fringed with hair in ♂.

139. (140) Interstices second, fourth and sixth absent or represented by a few granules, the others little raised, costiform, setigerous *T. ambiguus* Macl., *T. dubius* Macl.

140. (139) All interstices equal, with depressed granules, hardly costate *T. Rayneri* Macl.

Notes on Table.—The numbers in brackets represent the lines in antithesis to those represented by the numbers outside the brackets.

e.g., 1(34) Internal rostral ridges well defined.

34(1) Internal rostral ridges obsolete.

The intervening lines are all governed by the preceding, until the number in antithesis is reached.

I have tried to simplify the table by grouping the species, at the same adhering, as far as possible, to Macleay's Sections. These groups must, though most of them fairly natural, be regarded as only tentative, and subject to revision as our knowledge of the genus increases.

Group i.—The smaller species, *e.g.*, *T. parvus*, *T. clavicornis*, etc., should perhaps be separated.

Groups ii. and iv. might perhaps be merged, or Group iv. further subdivided.

Group vii.—*T. caviceps* does not seem much at home here; the rostrum would exclude it from Group xii.

Group ix.—I have not ventured to tabulate the species of this very definite and difficult group, pending determination of *T. semispinosus* and *T. pastillarius*.

Groups xvii., xviii., and xix. seem close, and yet differ in some essentials; they are all represented by single species.

TALAUINUS RIVERINÆ, Macl.

Macleay, Trans. Ent. Soc. N.S.Wales, i., 1865, p.218; Lea, Trans. Roy. Soc. South Aust., xxviii., 1904, p. 111; *T. maculatus* Macl., *loc. cit.*, p. 220.

♂. Form ovate, elytra ampliate posteriorly, size small. Black; densely clothed with brown, maculate with lighter; prothorax trivittate on disc, and with a curved vitta on each side; setæ light-coloured.

Head convex, separately from rostrum. Rostrum short, wide; external ridges rugosely punctured; internal ridges long, prominent, somewhat raised at base; lateral sulci long, deep; median area linear, depressed. Scrobes not open posteriorly. Eyes subrotundate. Prothorax (4 × 5 mm.) rounded, ocular and median lobes rather prominent, collar-constriction moderately defined; disc finely and closely granulate, granules somewhat obscured by clothing; sides granulate. Elytra (10 × 7 mm.) widely ampliate, subtruncate at apex, base feebly arcuate, humeral angles not prominent; disc punctato-striate, punctures shallow, transverse; interstices little raised, finely granulate in single series, duplicated in the middle, seventh interstice obsolete, quite lateral; sides feebly granulate. Intermediate ventral segments short, grooved; fifth strongly concave, with a narrow semilunar lævigata area along posterior edge, bounded by a feeble ridge in front; apex of forceps present at sides; apical dorsal segment transversely concave below at apex. Legs simple.

♀. Of a more elliptical-ovate form, the elytra more produced; intermediate ventral segments longer, fifth not excavate, but with a slight depression in centre. *Dimensions*: ♂, 14.5 × 7 mm.; ♀, 16 × 7 mm.

Hab.—N.S.Wales: Riverina (Macleay Museum: type), Mulwala, Murray River (T. G. Sloane); (?) N.E. Coast (*T. maculatus*).

The habitat for *T. maculatus* is given by Macleay as North-East Coast, but such, I believe to be quite erroneous. It

appears to be a common species in the Riverina district of New South Wales. Lea would refer this species, as well as *T. penicillatus* Macl., *T. tomentosus* Boisd., *T. exasperatus* Er., and the species I have here renamed *T. tenebricosus*, to *Psalidura*, on account of the transversely excavate apical segment of the abdomen, and the presence of anal appendages. On dissecting specimens of *T. Riverinæ* and *T. tenebricosus*, however, the appendages were seen to consist of two short, pointed blades, which are conjoined at the base, the connection being membranous; in *T. Riverinæ* a vertical median plate is present; this is replaced in *T. tenebricosus* by a chitinous thickening. The forceps thus formed are similar to those in such typical species as *T. rugifer* and *T. bucephalus*, although these species have no vertical plate; this latter, however, where present, is placed in front of the forceps, and seems to act as a support for muscular attachment. In *T. M-elevatus* Lea, the forceps, though shaped much as in *T. Riverinæ*, are wholly chitinous, and the median vertical plate also is present. I would propose, therefore, that the name *Psalidura* should be restricted to such species as have the forceps more or less projecting externally, with the blades not conjoined at the base but merely connected by muscular and ligamentous attachments. It must be admitted that, morphologically, these insects resemble *Psaldirua* more than they do the typical *Talaurinus* of the tuberculate section; at the same time, the connection between the members of the *Granulati* is too close, and the differences too evenly graded, to admit of violent separation of a few species; probably it might be better to separate generically the whole Section *Granulati* from the Sections *Tuberculati* and *Costati*.

TALAUINUS EXASPERATUS ER.

Erichson, Wieg. Arch. i., 1842, p. 191.

There is before me the female of a species of *Talaurinus* from Tasmania, which probably belongs to this species. In general build and appearance, it seems close to *T. Howitti*,

but should be different, *inter alia*, on account of the apices of the forceps in the ♂, as described by Erichson, being present at the sides. In Masters' Catalogue, *T. Howitti* is placed as a synonym of *T. exasperatus*, but I believe erroneously, and no authority is quoted for so doing. Following is a short description of my specimen.

♀. Head and rostrum much as in *T. Riverinae*, but less rugosely, though rather closely, setigero-punctate. Prothorax (3 × 4 mm.) rounded, apex rounded above, with evident post-ocular sinuosity, but less marked than in *T. Riverinae*; disc with a transverse apical impression and irregular ones on each side near base; granules depressed, obscured by clothing; sides granulate; prothorax trivittate on disc, and vittate on sides. Elytra (8 × 5.5 mm.) ovate, apex moderately produced, base almost truncate, humeri subrectangular, not produced; disc foveo-striate, foveæ small, open; interstices triangularly raised, finely granulate in single series, sometimes duplicated, seven present on disc, granules small, not prominent, obscured by clothing, setigerous. Beneath convex, intermediates long, with scattered setigerous punctures, fifth without impressions. *Dimensions*: ♀. 12 × 5.5 mm.

Of the male, Erichson states: "Mas abdominis segmento ultimo ventrali intruso truncatoque, dorsali prominulo, truncato, utrinque fasciculato." The dimensions given are long. 5½ lin.

TALAUINUS TENEBRICOSUS, n.sp.

T. morbillosus Macl. (*nec* Boisd.), nom. præocc., *loc. cit.* p. 222.

♂. Small, elongate, subovate. Black, opaque; densely clothed in cavities with dark brown, almost black, scales; setæ yellow.

Head convex, separately rounded from rostrum, setigero-punctate. Rostrum short, thick, rather deeply excavate anteriorly, external ridges parallel, feebly convex in profile, internal ridges short, rather prominent at base, little conver-

gent and separated throughout by a depressed median area. Scrobes not open posteriorly. Eyes subrotundate. Prothorax (3.5×4.5 mm.), transverse, rounded on sides, widest across middle, apex with a definite postocular sinuosity, lobes small; disc with a faint collar-impression, regularly and closely covered with fine rounded setigerous granules. Elytra (9×6 mm.) not greatly ampliate, but apex abruptly rounded, almost subtruncate; base truncate, humeral angles not prominent. Disc with sculpture confused, with small shallow depressions in striæ, separated by transverse setigerous ridges; interstices not prominent, barely traceable apart from the intrastrial ridges, finely granulate in single series, occasionally duplicated; sides punctato-striate. Metasternum with a feeble longitudinal concavity. Ventral segments, third and fourth flat, together equal to fifth segment; fifth segment rather deeply concave, deepest along posterior edge, which is slightly raised; forceps with membranous tips protruding at sides. Legs simple. On dissection, forceps small, chitinous, more or less united at base, no median vertical plate; penis with apex obtusely rounded, upturned and feebly mucronate.

♀. Differs in its more ovate form, with apex of elytra more gradually rounded; beneath convex, the intermediate segments rather longer, fifth segment with a \perp -shaped impression. *Dimensions*: ♂. 14×6 mm.; ♀. 15×6 mm.; P. 4×5 , E. 10×6 mm.

Hab.—Victoria.

This species is the one considered by Macleay to be *T. morbillosus*, Boisd., but the type of that species is quite a different insect, allied to *T. orthodoxus* Lea. Erichson has described a Tasmanian species as *T. morbillosus*, which, from description, I believe to be *T. penicillatus* Macl., an insect closely allied, but differing in clothing, elytral granules, etc. The present species, which has been referred by Lea to *Psalidura*, may be recognised among its immediate allies by its uniform dingy black appearance.

TALAUINUS TOMENTOSUS Boisd.

Boisduval, Voy. Astrolabe, ii. 1835, p. 373; Macleay, *l.c.*, p. 217.

♂. Narrow, elongate-ovate, convex. Black, densely clothed with rusty-coloured scales; setæ yellow.

Head convex, forehead somewhat flattened, continued on into rostrum. Rostrum short, thick; external ridges subparallel, not extending up forehead, internal long, more prominent at base, lateral sulci shallow, median area linear, depressed, running into basal sulcus; head and rostral ridges sparingly setigero-punctate. Scrobes short, simple. Eyes subovate. Prothorax (4.25 × 5.25 mm.) rounded on sides, base truncate, apex truncate above with a feeble postocular sinuosity; disc finely and closely granulate, the granules somewhat irregular in size, feebly depressed, and setigero-punctate; sides granulate. Elytra (12 × 7 mm.) little ampliate, apex abruptly rounded, base truncate, humeral angles not marked; discal striæ feebly and shallowly punctate; interstices broad, feebly convex, irregularly granulate in double series, single on declivity; granules discrete, rounded, umbilicated, each bearing a long seta; seventh almost quite lateral, the disc running in to the sides without delimitation, sides granulate. Intermediate ventral segments long, together longer than second. Fifth rather deeply excavate, with a transverse sulcus along posterior border.

♀. Rather more robust than the ♂.: ventral segments convex, fifth segment not excavate, but with a rather feeble impression near apex. *Dimensions*: ♂. 18 × 7 mm.; ♀. 17.5 × 7 mm.

Hab.—Victoria: Western Port (Boisduval), Cape Otway.

Apparently a rather common insect along the southern coast of Victoria, and said by Macleay to occur in Tasmania, but I have never seen an authentic specimen from there. I believe I am right in attributing Boisduval's name* to this species, though it is possible that *T. penicillatus*, which also

*See Postscript, p. 134.

occurs in Victoria, was the one he described. The species may be readily recognised by its elongate form and dingy, almost rusty, clothing.

TALAUINUS PENICILLATUS Macl.

Macleay, *loc.cit.*, p.220; *A. morbillosus* Er., *loc.cit.*, p.191.

♂. Of same form and appearance as *T. tomentosus*, but smaller. Clothing muddy-grey, feebly maculate on elytra, setæ yellow.

Head convex, forehead not flattened, but continued into rostrum: head with distant setigerous punctures, setæ black. Rostrum short, external ridges rugosely punctate, internal only prominent at base, median area broad not depressed, median notch feeble. Prothorax (4 × 4.5 mm.) relatively narrower than in *T. tomentosus*, the granules larger, less depressed, and with longer setæ. Elytra (10 × 6 mm.) narrow not ampliate, gently rounded on sides, apex rounded, base truncate without marked humeral angles: striate, interstices more regularly granulate, granules subnitid, more prominent, in single series duplicated in middle of each interstice: seventh almost quite lateral, distinct; sides granulate. Undersurface as in *T. tomentosus*: the apices of the forceps present at the sides. *Dimensions*: ♂. 15.5 × 6 mm.

The female differs in the usual manner.

Hab.—Tasmania: Victoria.

Close to *T. tomentosus*, but the granules though fine are noticeably coarser, both on prothorax and elytra, and the elytral striæ are deeper, and the interstices more convex. With a lens, the intrastrial setæ are not traceable or only in the more lateral striæ. Erichson's description leaves no doubt of the identity of his species; unfortunately his name was preoccupied.

TALAUINUS PANDURIFORMIS, n.sp. (Plate ii., fig. 5).

Small, ovate, ampliate posteriorly. Black, densely clothed with dark brown scales; setæ black.

Head strongly convex, densely clothed, and with scattered setæ. Rostrum short, excavate; external ridges parallel, feebly convex in profile; internal short, little prominent: lateral sulci shallow; median area deepened anteriorly. Scrobes short, deep, closed posteriorly. Scape rather long. Eyes ovate. Mandibles produced into a short horn at the outer angles. Prothorax (4×5 mm.) evenly rounded on sides, apex with a rather deep postocular sinuosity and well-defined ocular lobes; transverse impression marked behind apex: median line present; disc closely set with small depressed setigerous granules obscured by clothing. Elytra (9×6.5 mm.) at base narrower than across middle of prothorax, rather widely dilated posteriorly, apex somewhat abruptly rounded, base deeply arcuate, humeral angles produced forwards, tuberculi-form; striate, the striæ hardly foveate but with a low row of small setæ down the centre, interstices somewhat raised, the alternate ones more so, hardly granulate (except posteriorly and on the outer interstices, where the granules are more evident, though obscured by clothing), but strongly setigerous, setæ in single series on second, fourth, and sixth, in double on the others; sides punctato-striate, interstices with small but definite granules. Beneath flat, rather strongly covered with scattered setæ; intermediate segments short, fifth with a wide shallow excavation at apex, apices of forceps visible at sides. Apical dorsal tergite rugosely punctured. Legs simple.

♀. Less abruptly rounded behind, otherwise much as in ♂; convex beneath, fifth with a feeble rounded apical impression. *Dimensions*: ♂, 14×6.5 mm.; ♀, 14×6.5 mm.

Hab.—North Queensland. Sent by F. P. Dodd.

A short species, somewhat of the appearance of *T. melancholicus* Lea, but apparently nearer to *T. Riverinae*. The apical ventral segment is widely and shallowly concave in the male, but hardly excavate; the apices of the forceps are present at the sides. From *T. septentrionalis*, the simple tibiæ will distinguish it, though otherwise the two females are hardly distinguishable.

TALAUINUS APICIHIRTUS, n.sp.

♂. Small, broadly ovate. Black, densely clothed with chocolate-brown scales, head and prothorax trivittate, elytra maculate with grey; setæ black, anal bristles dark brown, almost black.

Head strongly convex, densely clothed, and with scattered setæ. Rostrum short, external ridges slightly divergent posteriorly; internal short, distinct; median area rather deep, sulciform; lateral basal sulci rather shallow. Scrobes short, defined posteriorly. Eyes ovate. Prothorax (3.5×4.5 mm.) transverse, median lobe not produced, ocular lobes strong, touching eyes in repose, collar-impression and median line well defined; set fairly closely with small, round, somewhat depressed granules, each with a setigerous puncture situated on top of granule. Sides granulate, obsoletely so towards coxæ. Elytra (8×6 mm.) wide, apex abruptly rounded, base lightly arcuate, humeral angles marked: disc with longitudinal rows of small punctures, hardly traceable, ridges between punctures setigerous; interstices, first, third, fifth and sixth raised, setigerous in double and single series, the sixth and apical portion of fifth distinctly granulate; second and fourth not raised, rather depressed; second with four or five, fourth with one or two, small, hardly apparent granules; the whole sculpture very obscure: sides with interstices definitely granulate. Beneath closely setigero-punctate, second segment hardly longer than one of the intermediates, these latter very short; fifth segment with a wide and deep excavation extending back to anterior margin, filled with long, stout, setose hair of a dark colour; ends of forceps present at sides, apical tergite strongly punctured. Femora unarmed, tibiæ without notch. *Dimensions*: ♂, 13×6 mm.

Hab.—Queensland: Toowoomba (Cox), Bunya Mountains (Queensland Museum).

A short broad species, in general facies close to *T. panduriformis*, but with a remarkable anal excavation, which might

almost entitle it to be placed in *Psolidura*. In some respects it approaches *Mygotrotus*, but the rostrum is different, and the scape, though thicker than usual, is longer than in that genus.

Var. HEMORRHOIDALIS, n. var.

Differs from the type only in the character of the anal hair of ♂; this being of a bright rufous colour, the bristles not quite filling the excavation.

♀. With elytra somewhat less abruptly rounded; beneath convex, intermediates longer, fifth with a foveiform depression near apex. *Dimensions*: ♂, 12 × 5.5 mm.

Hab.—Queensland: Cunnamulla (Queensland Museum).

TALaurINUS HOWITTI, Macl.

Macleay, *loc.cit.*, p.217; *T. Victoria* Macl., *ibid.*, 1866, p.318.

♂. Small, elongate-ovate. Black, densely clothed with brownish squames, variegated with white, forming three vittæ on prothorax, and maculate on elytra. Setæ long, light brown.

Head convex, separated from rostrum by a distinct sulcus. Rostrum short, shallowly excavate, external ridges short, sub-parallel; internal more prominent, strongly convergent; lateral sulci triangular, shallow. Scrobes simple. Eyes sub-ovate. Prothorax (3 × 4 mm.) rotundate, strongly rounded on sides; apex rounded above, with a well-marked postorbital sinuosity; a feeble transverse impression present behind apex; disc closely set with small setigerous granules obscured by clothing; sides granulate. Elytra (9 × 6 mm.) widest about middle, apex strongly rounded, base feebly arcuate, the humeral angles rounded; punctato-striate, punctures transverse, obscured by clothing; interstices slightly raised, setigero-granulate in single series, duplicate on third and at base of sutural, the alternate ones more prominent, seventh forming lateral border; sides striate. Intermediate segments moderate in length; fifth segment with a shallow mesial excavation, with a deeper transverse fossa having a short prominent tubercle on either side. Legs simple.

♀. Similar to ♂, but more ovate, beneath with a small longitudinal median impression on apical segment. *Dimensions*: ♂, 12 × 6 mm.; 11.5 × 5 mm.

Hab.—Victoria. Type in Macleay Museum.

Readily distinguished among its immediate congeners by the form of the anal excavation. Its nearest ally appears to be *T. simplicipes* Lea, which, however, has the excavation more transverse, and the tubercles farther apart.

T. Victoriae was founded on a large female (13 × 5½) of the same species; the two specimens under the label in the Macleay Museum appear both to be females.

TALAUINUS SEPTENTRIONALIS, n.sp.

(Plate ii., fig. 3.)

♂. Small, elongate-ovate. Black, rather densely clothed with brown, variegated with lighter and darker patches on elytra, head densely clothed, feebly trivittate, prothorax with a narrow median vitta, and broader lateral ones; setæ dark reddish-brown; beneath a narrow median black vitta present.

Head strongly convex, not continued on to rostrum in same direction, rather thickly setigerous. Rostrum short, excavate; external ridges parallel, internal short, but equally prominent, convergent but not meeting; median area strongly depressed throughout, widened out in front, basal sulci deeply foveate. Scrobes simple, deep. Prothorax (3.5 × 4.5 mm.) rather strongly dilate, subangulate; apex rounded above, with a rather pronounced postocular sinuosity; disc with a strong transverse apical impression and an impressed median line, densely set with moderately small granules obscured by clothing. Elytra (8 × 6 mm.) evenly rounded on sides, apex rather strongly rounded, base feebly arcuate, angles not prominent; with rows of small, fairly well-defined punctures, the intervening partitions setose but not raised; sutural, at base, third and fifth interstices most prominent, with numerous long setæ in double series, hardly granulate; second, fourth, and sixth with setæ in single series; sides with interstices feebly granu-

late. Beneath rather closely setigero-punctate; intermediate ventral segments short, together but little longer than second; fifth with a feeble median impression, with a small fovea at extreme apex. Anterior tibiæ strongly bent inwards at apex, and with a subapical notch; intermediate tibiæ with a rather stronger notch, but not bent at apex; posterior tibiæ without notch.

♀. More elliptical ovate; convex beneath, apex with a feeble foveiform impression: anterior tibiæ less strongly bent at apex, and notches on tibiæ much feebler. *Dimensions*: ♂, 12 × 6: ♀, 14 × 6.5 mm.

Hab.—North Queensland: Chillagoe, Mt. Garnett.

Apparently a rather common North Queensland insect, and somewhat variable in size and clothing. The specimen selected as type is considerably smaller than another male (14 × 6.5 mm.) which, however, is not in good condition, and, apart from size, I can discover no difference between them. The colour of the clothing is also liable to damage, immersion in alcohol or water turning it of a dingy brown. A specimen from Chillagoe has the clothing with a reddish tinge, and the setæ lighter: I can, however, detect no other difference. Some, in fact most, of the males I have seen, lack the ventral vitta.

TALaurINUS CARPENTARIE, n.sp.

(Plate ii., fig. 4.)

♂. Very close to *T. septentrionalis*, but larger. Densely and almost uniformly clothed with greyish subpubescence, elytra feebly maculate with darker, below thickly maculate with greyish intermingled with darker setæ; setæ light.

Head convex; rostrum very short, external ridges rather divergent, flattened posteriorly; base with a shallow M-shaped impression; internal ridges little prominent, median area depressed. Prothorax (4.5 × 5 mm.) somewhat unevenly set with non-contiguous granules, hardly concealed. Elytra 10 × 6.5 mm.; sculpture much as in *T. septentrionalis*, but with the punctures rather more irregular and open, the partitions

between each with a small granule, interstices with small granules obscured by clothing. Beneath very feebly impressed at apex. Legs as in preceding species. *Dimensions*: ♂, 15 × 6.5 mm.

Hab.—North Queensland: Gulf of Carpentaria.

Close to the preceding, but larger and with different clothing, especially on the undersurface. I have but a single male, which came originally from Mr. C. French, and is dated 1893. I received it among the Amycterides given to me by Mr. T. G. Sloane.

TALAUINUS PULVERULENTUS, Macl., *loc. cit.*, p. 223.

♂. Small, elongate. Black, rather densely clothed with sooty scales feebly variegated with brown and grey; setæ short, black.

Head convex, densely clothed with yellowish-grey scales, with a brown patch on either side of middle. Rostrum with greyish scales, external ridges subparallel, internal rather more prominent, slightly convergent; median area rather strongly canaliculate. Scrobes deep, open posteriorly. Eyes small, round. Antennæ with scrobes short (1.5 mm.), thickened and curved; club long. Prothorax (3 × 4 mm.) rather strongly dilate on sides, apex with a well marked post-ocular sinuosity; disc with a feeble, irregular, transverse impression behind apex; granules small, hemispherical, fairly closely, though somewhat irregularly, placed; sides granulate. Elytra (8 × 5 mm.) gently rounded on sides, base subtruncate, humeral angles marked by small granules; punctato-striate, punctures small, open; interstices little raised, with small, irregular, elevated points, obsolete and barely traceable, hardly granulate, each with a long seta; at sides more definitely granulate, setæ in single series except in middle of third. Metasternum with a nipple-like projection on either side; intermediate ventral segments long; fifth segment with a feeble longitudinal depression; a median vitta of dark brown setæ present. Legs simple. *Dimensions*: ♂, 13 × 5 mm.

Hab.—S. Queensland: Daandine (T. G. Sloane), Cunnamulla (H. Hardcastle). Type in Australian Museum.

The female of this species resembles the male closely, but lacks the tubercles on the metasternum. The type is a male, but has the under-surface obscured by dirt; the tubercles, however, can be seen.

TALAUINUS PARVUS, n.sp.

(Plate ii., fig. 10.)

♂. Small, elongate. Black, densely clothed with greyish-brown scales, head with a triangular patch of dark brown on either side of median vitta, elytra feebly maculate with blackish, below with a median vitta of short black setæ; setæ dark brown.

Head strongly convex, densely clothed and with scattered setæ. Rostrum short, deeply excavate; internal ridges more prominent than external, little convergent; median area deeply sunken, sulciform, extending to base; lateral sulci long, comparatively shallow. Scrobes rather wide, but not open posteriorly. Eyes small, slightly longer than wide. Scape comparatively long, somewhat incrassate, but not greatly inflated; second joint of funicle a little longer than third, considerably shorter than first; club long, thick. Prothorax (3×3.5 mm.) moderately widely dilate, subangulate, apex with a rather deep postocular sinuosity; collar-constriction ill-defined, median line evidently impressed; granulate, the granules small, obscured by clothing, each bearing a long black seta. Elytra (7×4 mm.) little widened posteriorly, apex moderately produced, rounded, base feebly arcuate, humeral angles marked but not produced; disc with sculpture confused and obscured by clothing, consisting of rows of shallow punctures, each subtended by a long seta, interstices feebly raised; the first, third, and fifth more prominent, finely granulate, granules hardly distinct, denoted by long setæ; sides more definitely punctate, interstices more evidently granulate. Beneath flat, with scattered setigerous punctures, median

vitta present; intermediate segments comparatively long, apical almost without any impression. Metasternum without tubercles. Legs simple. *Dimensions*: ♂, 10 × 4 mm.

Hab.—Queensland: Gayndah (Type in Australian Museum).

In general appearance closely resembling *T. pulverulentus*, but distinguished, *inter alia*, by the absence of metasternal tubercles, and by the different scape. From *T. inconspicuus*, the smaller size and the presence of a median vitta beneath should be sufficient to separate it. Two females in the Macleay Museum appear to belong to this species; they have the antennal scape rather wider, in this respect approaching *T. pulverulentus*.

TALaurINUS TESSELLATUS Pascoe.

Pascoe, Journ. Linn. Soc. xii., 1873, p. 16.

♀. Ovate, robust, size moderate. Densely clothed with silaceous scales; head with median vitta bifurcate on rostrum and supraorbital vittæ; prothorax trivittate, elytra strongly maculate with whitish, beneath with white and yellow scales along sides and in middle of each segment; setæ brown.

Head convex, forehead not excavate, densely clothed. Rostrum short and thick, external ridges subparallel, setigero-punctate, internal obsolete; median area not raised, lævigata, densely clothed along sides; lateral sulci shallow, with small deeper foveæ at base. Scrobes short and deep. Eyes ovate. Prothorax (5 × 6 mm.) rounded, apical margin produced into a moderately definite median lobe, ocular lobes feeble; disc with numerous fine setigerous granules, not contiguous, median line without granules; sides granulate. Elytra (12 × 8 mm.) ovate, apex rather strongly rounded, base feebly arcuate, humeral angles not produced but marked by a small nodule; disc foveo-striate, foveæ open, shallow, obscured by clothing, no intrastrial granules present; interstices finely setigero-granulate, for the most part in single series, dupli-

cated in middle of second, third, and fifth. Beneath strongly convex; intermediate segments long; fifth segment with a transverse impression. *Dimensions*: ♀, 16 × 8 mm.

Hab.—W. Australia.

Four specimens (♀) lent by the British Museum, one marked "compared with type"; one labelled *incisus*, presumably an MS. name.

One specimen differs in having the granules larger, and in being less convex beneath, with a shallow transverse fovea at the apex of the fifth segment.

Closely allied to *S. multigranulatus* Lea, which I would refer to *Talaurinus*, but appears to differ in the larger size, denser clothing on rostrum, smaller granules, and larger elytral foveæ.

TALaurINUS MULTIGRANULATUS Lea.

Sclerorrhinus multigranulatus Lea, Deutsch. Ent. Zeitschr., 1910, p. 161.

Referred by Lea to *Sclerorrhinus*, on the ground of wanting the internal rostral ridges. The rostrum, however, is not carinate as in *Sclerorrhinus*. I possess a male, which I believe to be referable to this species; it differs from the type ♀ in having the elytra more abruptly rounded at apex, and in having the fifth ventral segment shallowly and widely excavate. This excavation strongly resembles that of *T. Riverinae* and its immediate allies; and to such, I believe, the rostrum notwithstanding, it is most nearly related. *T. tessellatus* Pasc., is undoubtedly congeneric, and Lea has referred it also to *Sclerorrhinus*. Unfortunately I have never seen a male of Pascoe's species.

TALaurINUS ROEI Bohemann.

Bohem., Schönh., Gen. Curc., vii, (1), 1843, p. 62; Macleay, *loc.cit.*, p. 231.

♀. Ovate, size moderate. Black, densely clothed with brown, head with a thin median line bifurcate on rostrum, supraocular vittæ and feeble prothoracic vittæ white, elytra maculate with white; beneath with a few yellow scales in middle of the segments.

Head convex, forehead feebly concave, densely clothed and rather strongly setigero-punctate. Rostrum short, excavate, external ridges subparallel, coarsely punctate, internal obsolete; median area smooth, not shining, base bifoveate. Scrobes not extending to eye. Eyes subrotundate. Prothorax (4.5×6 mm.) transverse, postocular sinuosity open; closely granulate, granules small, not contiguous, slightly larger in centre. Elytra (11×8 mm.) gently rounded on sides, somewhat flattened on disc, apex strongly rounded, base feebly arcuate, humeral angles with obtuse nodule not produced; disc punctato-striate, punctures small, intrastrial ridges not granulate, interstices granulate in single series, duplicated on basal half of third, on second only reaching to declivity and more spaced out, on fourth only reaching to middle, sutural granules fine throughout. Beneath, three terminal segments coarsely punctate; fifth with a shallow transverse impression at extreme apex enclosing two small subcontiguous nodules. *Dimensions*: ♀. 17×8 mm.

Hab.—West Australia.

In assigning the name *T. Roei* Bohem., to the above species, I am doing so on the evidence of two specimens lent by the British Museum authorities, one of which was labelled "*T. Roei*, compared with type." This is not the species commonly named *T. Roei* in Australian cabinets, which is a species of the *T. pustulatus*-type.

The exact position of *T. Roei* is, in my opinion, somewhat doubtful; I have thought it best to group it with *T. tessellatus* Pasc., but it possibly may be an aberrant member of the tuberculate section, as, in its rostrum and ventral segments, it approaches *T. funereus* Pasc. Unfortunately I do not know the male.

TALAUINUS CLAVICORNIS, n.sp.

(Plate ii., fig. 1.)

♂. Small, elliptical-elongate. Black, densely clothed with blackish-brown scales, head and prothorax trivittate, elytra maculate with white; setæ dark brown.

Head strongly convex, separately from rostrum, densely clothed and more sparingly setigero-punctate. Rostrum short, little excavate; external ridges flattened above; internal short, more prominent at base, basal sulci shallow, median area feebly raised in centre. Scrobes strongly curved, extending almost to eye. Eyes small, round, rather deeply set. Scape short, pedunculate, strongly sinuate and greatly widened towards the free extremity, the inner edge obtusely pointed. Prothorax (4×4.5 mm.) strongly rounded on sides, apex rounded above, with a feeble postocular sinuosity; disc with collar-impression most marked laterally, closely and evenly covered with round, flattened granules, having a tessellate appearance, granules clothed and each bearing a long seta. Elytra (8.5×5 mm.) evenly rounded, base feebly arcuate, the humeral angles marked, but not produced; punctato-striate, punctures small, rather open; interstices of first, third, fifth, and seventh raised, subcostate, with minute subobsolete granules bearing long setæ, interstices of second, fourth, and sixth not raised, and with only a few setigerous granules. Beneath flattened, rather coarsely punctate, fifth ventral segment with a moderately deep impression bounded anteriorly on either side by a short elevated ridge. Legs simple. *Dimensions*: ♂. 12.5×5 mm.

Hab.—New South Wales: Glen Innes (T. G. Sloane).

Not close to any described species, except possibly *T. parvus* and *T. pulverulentus*, from which, however, the inflated scape will separate it. From *T. sulciventris*, though its closest ally, with the exception of some undescribed species, the differences in rostrum and undersurface should be distinctive. As indicated above, there are one or two undescribed species which

approach this one closely, but none that I have seen possess the curious flattened, pavement-like granules on the pronotum.

TALAUINUS SULCIVENTRIS, n.sp.

(Plate ii., fig. 2.)

♂. Small, briefly oblongate, subparallel. Black, densely clothed with muddy scales, prothorax feebly trivittate, elytra feebly transversely maculate with white. Setæ stout, dark brown.

Head strongly convex, densely clothed, with a few stout setæ interspersed, separated from rostrum by a deep transverse sulcus. Rostrum short, little excavate, external ridges strongly convex in profile, basally terminated by a distinct hiatus, the prolongation downwards of the basal sulcus; internal ridges prominent at base; lateral sulci long, moderately deep; median area depressed throughout. Scrobes strongly curved, separated from eye by a prolongation of the basal sulcus. Eyes small, subrotundate. Antennæ with scape short, strongly thickened to apex, hardly sinuate, but with a strong laminate projection from inner border. Prothorax (4×5 mm.) strongly rounded on sides, apical margin rounded above, ocular lobes rather strongly developed, touching eyes in repose; evenly and closely set with small, round, contiguous granules, clothed and setigerous; sides granulate. Elytra (8×5.5 mm.) broad, somewhat flattened above, gently rounded on sides, base rather strongly emarginate, shoulders moderately produced not noduliform; disc shallowly punctato-striate, punctures obscured by clothing; interstices granulate, the first, third, and fifth somewhat raised, subcostate, with small setigerous granules; second and fourth not raised, and with granules more scattered. Beneath with a strong sulciform depression extending over metasternum and first segment, second short, almost equal to third, fifth with a simple shallow depression at apex; ventral segments rugosely punctate. Legs simple.

Dimensions: 12×5.5 mm.

Hab.—Queensland: Roma (E. A. Ferguson).

I know of no species that approaches this one in the structure of the rostrum, and in the curiously sulcate ventral surface. It belongs, like *T. clavicornis*, to a group which will probably be found to be fairly numerous in New South Wales and Queensland, and is characterised by the possession of a greatly thickened or inflated scape. In the present species, the form of the scape is suggestive of that possessed by species of *Bubaris*.

TALaurINUS SQUAMOSUS Macl., *loc. cit.*, p. 219.

♂. Small, elongate, narrow. Black, densely clothed with muddy brown scales, interspersed with lighter grey; prothorax trivittate, elytra maculate, the light scales forming longitudinal vittæ near sides; sides and legs with greyish scales; setæ dark brown.

Head convex, separately so from rostrum, but without a marked sulcus between. Rostrum very little excavate, external ridges slightly divergent, basally flattened; internal prominent, raised posteriorly, separated throughout by median area; lateral sulci shallow. Scrobes open posteriorly. Eyes large, subovate. Prothorax (4 × 4 mm.) evenly rather feebly rounded, postocular sinuosity feeble, apex truncate above; a faint transverse collar-impression; finely granulate, granules discrete, obsolete along vittæ; sides granulate. Elytra (9.5 × 5 mm.) elongate-ovate, base truncate, humeral angles not marked; each elytron with three broad sulciform striæ, each containing two rows of punctures obscured by clothing; interstices raised, finely granulate in double series, granules obscured by clothing, setigerous, sutural less prominent; sides punctato-striate, interstices not granulate. Beneath flat, sparingly clothed with scattered setæ; intermediate segments long, fifth with a feeble transverse impression at apex. Legs simple.
Dimensions: ♂. 13.5 × 5 mm.

Hab.—New South Wales: Riverina.

A common species in the south of New South Wales; also, I believe, occurring in Victoria. It may be readily recognised

by its narrow, depressed form, by its dense clothing, and by the alternate elytral striae being feebly raised, the intermediate ones being quite obsolete. The female closely resembles the male.

TALAUINUS MEGALONGENSIS, n.sp.

(Plate ii., fig. 13.)

♂. Small, elongate, convex; elytra obsoletely tricostate. Black, opaque; sparsely clothed with minute scattered greyish scales; setae long, black.

Head convex, continued into rostrum, rather densely squamose, and with scattered setigerous punctures. Rostrum short, little excavate save for a sulcus behind the apical emargination; external ridges feebly convex in profile, internal prominent at base and strongly convergent; median area wide, little depressed, lateral sulci rather deep; ridges somewhat coarsely setigero-punctate. Scrobes curved, open posteriorly. Eyes large; oval. Prothorax (3.5×4 mm.) widest in front of middle, subangulate, base truncate, apex with a well-defined postocular sinuosity, but with little-defined lobes, collar-impression marked; finely granulate, granules slightly depressed, contiguous, irregular along constriction and in middle near base, each with a large setigerous puncture; sides with smaller granules. Elytra (8.5×5 mm.) subovate, apex not mucronate base feebly arcuate, humeral angles marked, not produced; disc punctato-striate in double rows, punctures somewhat irregular, interstices (including sutural, which is only prominent at base) four in number, subcostiform, the second most prominent and extending to apex, each bearing a double or triple row of small setigerous granules. Sides striate-punctate, interstices not raised, but with minute scattered setigerous points. Undersurface rather closely setigero-punctate, each ventral segment with a feeble condensation of yellowish scales in the centre; intermediates long, fifth segment with a shallow mesial groove, deepening posteriorly.

♀. Of broader, more obese form, the elytra wider and constricted rather suddenly before apex, the latter more pro-

duced; beneath convex, median scales feebly marked, fifth segment with a feeble round impression at apex. *Dimensions*: ♂, 13 × 5 mm.; ♀, 14 × 6; P., 4 × 4.5; E., 9.5 mm.

Hab.—N. S. Wales: Megalong Valley, Blue Mts. (H. J. Carter); Forest Reefs (A. M. Lea).

Close to *T. squamosus* and the following. From the former, the absence of clothing is distinctive. The differences between this species and *T. inconspicuus* are pointed out under the latter.

TALAUURINUS INCONSPICUUS, n.sp.

(Plate ii., fig. 12.)

♂. Small, elliptical, narrow. Black, opaque, sparsely clothed with minute greyish scales feebly condensed on the elytra; head with faint supraocular and median vittæ; elytra with feeble black patches; setæ black.

Head convex, not markedly separated from rostrum, rather densely clothed, and with numerous scattered setigerous punctures, forehead with a moderately deep groove running into a basal median notch. Rostrum short, little excavate, external ridges slightly divergent posteriorly, internal equally prominent, long, separated at base by median notch; lateral sulci long, deep; median area little depressed, without scales in middle. Scrobes convex in outline, not open posteriorly. Eyes subovate. Scape moderate in length. Prothorax (4 × 4.5 mm.) widest in front of middle, subangulate on sides, apex with an open feeble sinuosity; transversely impressed behind apex, and more narrowly in front of base, median line only evident posteriorly; closely, somewhat irregularly, covered with small rounded setigerous granules; sides somewhat obsoletely granulate. Elytra (9 × 6 mm.) gently rounded on sides, apex rounded, mucronate; base gently arcuate, humeral angles with a small nodule, but not produced. Disc punctato-striate, the punctures small, open, each accompanied by a long seta above it; interstices only alternately raised, first, third, fifth, and seventh raised, feebly granulate, but rather strongly seti-

gerous in double series, the intermediate interstices neither raised nor granulate, but each with a long single row of setæ; sides punctato-striate, interstices granulate. Beneath concave over metasternum and first two ventral segments, convex with a feeble flattening over the others, the flattening on apical segment subquadrate, but hardly impressed; whole of under-surface with fine setigerous punctures. Legs simple. *Dimensions*: ♂.14 × 6 mm.

Hab.—Queensland: Brisbane (T. G. Sloane, R. Illidge, and Queensland Museum).

A small obscure species, in general appearance resembling a large specimen of *T. pulverulentus*, but without the metasternal tubercles. Very close to *T. Megalongensis*, but has the rostrum less excavate, with the internal ridges not meeting, the prothoracic granules rather finer, the intermediate elytral interstices setigerous, and the undersurface much less coarsely setigero-punctate. Each of the ventral segments has a patch of yellowish scales near the sides; in *T. Megalongensis* the scales are situated in the centre of each segment. I have recently obtained a female of this species from Mr. Carter; it differs in being larger and more robust (15 × 7 mm.), and in its convex undersurface without the feeble impression on the apical segment.

TALAUROUS VARIEGATUS Macl., *loc. cit.*, p.218.

♂. Of broad, robust, subparallel form. Black, clothed above with greyish scales, prothorax feebly trivittate, elytra maculate with white.

Head convex. Rostrum short, wide, little excavate, apical emargination deep; external ridges subparallel, somewhat flattened; internal feeble, slightly more prominent than internal at base; lateral sulci long, not deep, median area feebly carinate. Scrobes short, simple. Eye ovate. Mandibles with outer portion produced into a stout obtuse divergent horn. Prothorax (5 × 5.5 mm.) subrotundate, median and ocular lobes well defined, collar-impression feebly marked above;

closely, finely, evenly granulate, the granules, however, not touching; sides granulate. Elytra (10×7 mm.) oblongate, base feebly arcuate, humeral angles not produced, apex abruptly rounded; disc flat above, strongly declivous. Each elytron with three broad sulciform striæ, the two inner with a row of punctures, each overhung by a setigerous granule along each side, and a row of distant granules down middle, third sulcus subdivided by an intermediate row of more prominent granules, nearer to lateral interstice; interstices evidently raised, granulate in single series, in double on second, granules close set each with a long brown seta; sides punctato-striate, somewhat rugosely granulate. Undersurface concave, punctate, punctures coarser on abdominal segments; intermediates short, grooved along upper margin; fifth shallowly and broadly excavate, apices of forceps apparent at sides. *Dimensions*: ♂. 15×7 mm.

Hab.—Queensland: Victoria River (of Mitchell, now Cooper's Creek). Type in Macleay Museum.

Var. DARLINGENSIS, n. var. (Plate ii., fig. 7).

♂. Differs from type in being larger, with more white clothing on elytra, especially along lateral striæ and sides. Rostrum with median area distinctly carinate; prothoracic granules rather larger and more nitid; elytra with the inner two sulci without an intermediate row of granules.

♀. Each elytron with an intermediate row of granules present in the two inner sulci. *Dimensions*: ♂. 16×8 ; ♀. 16×7.5 mm.

Hab.—Darling River (R. Helms; Darling flood, 1890).

A very distinct species, with its variety, not close to any I am acquainted with. The comparatively strong forceps would appear to indicate some approach to *Psalidura*. I have preferred to regard the form from the Darling River as a variety, rather than a distinct species; but the differences are very evident, when compared with a typical specimen.

TALAUINUS HUMERALIS Macl., *loc. cit.*, p. 224.

T. nodulosus Macl., *loc. cit.*, p. 223.

♂. Size moderate, ovate. Black densely clothed with brown above, yellowish on sides and beneath.

Head strongly convex, densely clothed with dark scales becoming lighter externally, median line bare. Rostrum deeply sulcate in middle, rather narrower than usual, external ridges somewhat convergent, internal moderately prominent, lateral sulci shallow. Scrobes open posteriorly. Eyes subrotundate. Prothorax (4 × 5 mm.) rounded on sides, apex with the postocular sinuosity deep, lateral lobes well defined, median line impressed, sulciform; collar-impression feeble, except at sides; granules prominent, nitid, irregular in size and unevenly set, sides granulate above. Elytra (11 × 8 mm.) greatly dilated from base to behind middle, apex strongly rounded; base narrow, deeply emarginate, with the humeral angles strongly produced; disc foveo-striate, foveæ moderately deep and well defined, interstices barely traceable as such, but with small granules; granules also present on the interfoveal ridges, all of a black subnitid appearance, many of the foveæ confluent laterally. Intermediate ventral segments short; fifth deeply excavate, the excavation a boat-shaped fossa at apex; above the fossa, separated by a distinct edge, is a shallower depression, bounded on either side by a distinct carina, and with a third median one. Anterior femora with a faint ridge beneath. *Dimensions*: ♂. 16.5 × 8 mm.

Hab.—Queensland: Victoria River. (Type in Australian Museum)—N.S. Wales: Coonabarabran, Wellington.

The above description is taken from the type-specimen of *T. humeralis*. *T. nodulosus*, ♂., appears to be a deformed specimen of the same species; the female, under the label of *T. nodulosus*, is, however, a different species, and seems to me to be a female of *T. papulosus*. I have regarded the name, *T. humeralis*, as preferable, though *T. nodulosus* has priority of a page, because the latter is founded on a deformed specimen.

The species may readily be recognised by its ovate, widely dilate form, with prominent humeral angles; and by the numerous, fine, nitid granules on the elytra.

TALaurINUS EUOMOIDES Macl., *loc. cit.*, p. 225.

♀. Small, ovate, practically without scales, except a few muddy ones in the depressions.

Head and rostrum as in *T. humeralis*. Prothorax (3.5×4.5 mm.) transverse, with marked ocular lobes; median line and collar-impression present, but not deeply marked, rather closely set with small granules, absent along median line, and, to a certain extent, along apical-impression, sides non-granulate. Elytra (10×6.5 mm.) ovate, apex moderately produced, base deeply arcuate-emarginate, humeral angles greatly produced, outturned; with a series of small foveiform punctures, contiguous striæ not communicating, intrastrial ridges somewhat raised, setigerous, hardly granulate, interstices setigerous, the setæ arising from obsolete granules, more definite laterally and on sides. Beneath convex, without impressions. *Dimensions*: ♀. 15×6.5 mm.

Hab.—Queensland. (Type in Australian Museum.)

Close to *T. humeralis* Macl., but with less conspicuous granules; it is possible that it should be regarded as a small variety of that species. I have never seen a male with corresponding, almost non-granular elytra.

TALaurINUS ACROMIALIS, n.sp.

(Plate iii., fig. 11.)

♂. Small, ovate, strongly dilate, posteriorly. Black, opaque, sparingly clothed with muddy scales, each elytron with three, large, black, felted patches close to, but not touching, suture; one longitudinal, near base; another irregular one near middle, a third large patch on declivity, but not reaching apex; setæ black.

Head convex, densely clothed with muddy scales, a darker patch on either side of median line, the latter clear and with

a punctiform depression; sparingly setose. Rostrum moderately long, narrow, strongly excavate, external ridges convergent basally; internal long, convergent, prominent at base, lateral sulci narrow; median area strongly depressed, sulciform. Scrobes open posteriorly. Eyes rounded. Antennæ rather short, club thick. Prothorax (3.5 × 4 mm.) subangulate on sides, apex rounded above, with a strongly marked postocular sinuosity and prominent ocular lobes; disc with median line impressed, free from granules; granules arranged in a double line on each side of middle, tending to become confluent longitudinally; also a group of granules at sides, where the granules are more separated; sides not granulate below. Elytra (9.5 × 6 mm.; width at base, 3.5 mm.) strongly dilate posteriorly to beyond middle, apex abruptly rounded, base deeply emarginate, the humeral angles strongly advanced. Disc shallowly foveo-striate; foveæ small, open, the intervening ridges not raised, setigerous; interstices hardly raised, the third and fifth more prominent at base and subcostiform, not granulate, but setigerous in single series, the fifth and lateral interstices showing feeble evidence of granulation; sides foveo-striate, foveæ more distinct and interstices definitely, though feebly, granulate. Intermediate segments flat, short; fifth excavate, with a tricarinate central depression, and a deeper, narrow, semicircular fossa at apex, posterior edge strongly bisinuate. Anterior femora with a feeble central ridge in outer portion. *Dimensions*: ♂. 14 × 6 mm.

Hab.—Queensland: Brisbane (T. G. Sloane).

Allied to *T. humeralis*, but without the shining elytral granules of that species; from *T. scapularis*, *inter alia*, it differs in the fewer and confluent granules on the prothorax. The peculiar felted patches on the elytra give this species and *T. scapularis* a very characteristic appearance.

TALAUINUS SCALPULARIS, n.sp.

♂. Small, elongate-ovate, elytra dilatate. Black, densely clothed with brownish squames, each elytron with three, irre-

gular, velvety-brown patches, situated as in *T. acromialis*, but smaller and more irregular.

Head and rostrum as in *T. acromialis*, but the internal ridges rather more prominent and less convergent, forehead without a punctiform depression. Prothorax (3.5×4.5 mm.) more evenly rounded on sides, apex with the postocular sinusity more open, and the ocular lobes less prominent; collar-impression indistinct, median line impressed, free from granules; disc with small hemispherical granules, in apical portion roughly arranged in two lines on either side of middle, elsewhere more confused and continuous with the lateral group of granules. Elytra (10×7 mm.) with the basal emargination more open, humeral angles strongly produced (4 mm. apart): disc foveo-striate, the foveæ smaller, less open than in *T. acromialis*; interstices all equally prominent, feebly granulate, the granules not shining, obscured by clothing, unisetigerous, granules more noticeable towards sides. Beneath as in *T. acromialis*, but the anterior femora with a stronger ridge beneath.

♀. Form more produced posteriorly; prothoracic granules in groups, leaving a median and two lateral spaces free from granules, central groups in two lines of small separate granules; elytra with dark felted patches, more irregular and broken into smaller, more dispersed patches; beneath convex, fifth segment with an obtuse, feeble, median ridge: femora simple. *Dimensions*: ♂, 15×7 ; ♀, 17×7.5 ; P., 4×5 ; E., 12×7.5 mm.

Hab.—Queensland: Dawson River (Macleay Museum), Coen (C. French). (Types in Macleay Museum.)

Closely allied to the preceding, from which it differs in the prothoracic granules distinct, not confluent; in the base of the elytra more open; and in the elytral foveæ smaller, more depressed, the interstices with fine granules: it, perhaps, only represents a variety, but when the two species are placed side by side, they look different.

TALaurINUS ANGULARIS, n.sp.

(Plate iii., fig. 12.)

♂. Small, ovate. Black, in cavities with dense muddy yellow clothing. Setæ small, yellow; beneath with a yellow patch in centre of each segment.

Head as in *T. humeralis*. Rostrum deeply excavate, external ridges convergent to base, internal subobsolete, median area deeply canaliculate, lateral sulci small but distinct. Scrobes with a well-defined second fossa extending upwards in front of eye, not entering into orbit. Prothorax (3.5 × 4.5 mm.) rounded on sides, apex with ocular lobes moderately distinct, disc with a somewhat obscure collar-impression, median line not traceable except in being free from granules, with the small granules non-contiguous, rather more evenly set, fewer, and larger than in *T. humeralis*, but somewhat irregular in size; sides not granulate. Elytra (10.5 × 7 mm.) ampliate on sides, apex moderately produced, base widely and deeply emarginate, humeral angles greatly produced; disc seriate-foveate, foveæ open, separated by ridges little elevated and non-granulate, interstices with small shining granules in single and double series becoming duplicate and triplicate in centre; fifth, sixth, and seventh with rather larger, flatter, and more irregular granules, interfoveal ridges also granulate. Sides with deeper, more punctiform foveæ, interstices obsoletely granulate. Beneath, the intermediate segments rather long, fifth segment with a simple shallow impression in centre, feebly transversely deepened along posterior edge and sparingly clothed with dark setæ. Femora without a ridge beneath, tibiæ simple. *Dimensions*: ♂, 16 × 7 mm.

Hab.—Queensland (R. Illidge).

* *Postscript* (added May 31st, 1912).—I have recently received a female from Gunnedah (W. W. Froggatt); it has the secondary fossa of the scrobe strongly developed, causing the basal portions of the external ridges to be strongly convergent, even more so than in the male.

Allied to *T. humeralis* Macl., but separated by the structure, *inter alia*, of the apical ventral segment. The differences in the rostrum* and elytral granules prevent my regarding it as the male of *T. euomoides* Macl.

The unique specimen before me is densely covered with a muddy-yellow coating in the depressions, this being, I think, partly composed of scales or subpubescence, and partly the result of mud or exudate concealing the scales. I am indebted to Mr. R. Illidge's generosity for my specimen.

TALAUINUS GRISEUS Macl., *loc. cit.*, p. 219.

♀. Elongate, ovate, size small. Black, densely clothed with yellowish-brown scales, elytra maculate with black and white, prothorax trivittate, the lateral vittæ feeble; setæ black.

Head flattened on forehead, hardly separated from rostrum. Rostrum excavate, external ridges convergent basally, internal long, less prominent, convergent; lateral sulci shallow, median area depressed throughout. Eye round. Prothorax (3.5 × 4.5 mm.) rather feebly rounded on sides, apical sinuosity feeble, a well marked median line and an irregular collar-impression present; granules irregular, tending to become confluent in places, but for the most part discrete; sides granulate. Elytra (11 × 7 mm.) wider than prothorax, apex moderately produced; base emarginate, humeral angles marked but not produced; irregularly foveo-striate, foveæ shallow; interstices not raised, finely granulate in alternately double and single series; granules small, partially obscured, umbilicated, each with a long seta; the whole sculpture irregular and confused; sides granulate. Beneath, feebly concave, densely clothed with fulvous pubescence, condensed in centre of each segment, leaving a bare patch near sides. Apical segment feebly impressed. Legs simple. *Dimensions*: ♀, 15 × 7 mm.

Hab.—Queensland: Rockhampton.

A not uncommon Queensland species, readily recognisable, among its immediate congeners, by its light-coloured variegated clothing, which is almost of the nature of pubescence.

The foveæ are more shallow, and the granules much finer than in *T. papulosus*; while, from *T. Illidgei*, the great differences in the elytral sculpture and the clothing should prevent any possibility of the species being confused.

A specimen in the Australian Museum, from Gayndah, seems to represent a variety of this species. It differs in having the black portion of the clothing predominating; the prothorax is black, trivittate with grey; while the elytra are black, maculate with greyish; the prothoracic granules are also rather less prominent.

TALAUINUS PAPULOSUS MacL., *loc. cit.*, p. 222.

Small, elongate-ovate. Black, densely clothed with brownish scales, prothorax feebly trivittate, elytra faintly maculate with white; setæ black.

Head convex, separated from rostrum. Rostrum excavate, external ridges convergent, internal long, less prominent, lateral sulci shallow, median area depressed throughout. Eyes round. Prothorax (4×5 mm.) feebly rounded, apical sinuosity little marked, median line and collar-depression present; granules small, distinct, becoming irregular and confluent near median line; sides granulate. Elytra (11×6.5 mm.) gently rounded, apex moderately produced, base almost truncate, humeral angles not produced; disc with irregular shallow depressions not definitely striate, separated by small irregular rounded granules, arranged irregularly in double and single series alternately; sides more definitely striate, interstices granulate. Beneath, with a dark brownish vitta, widening out on apical segment; intermediates long, fifth with a moderately deep impression bounded laterally by two ridges extending to posterior lateral angles. Legs simple. *Dimensions*: ♂, 17×6.5 mm.

Hab.—Queensland (interior). Type in Australian Museum.

A duller, more darkly clothed, species than *T. griseus*, with much coarser granulation.

TALAUINUS VERMICOLLIS, n.sp.

♂. Small, elongate-ovate. Black, opaque; clothed in depressions with yellowish scales; beneath, with longer yellow pubescence on each segment, condensed in middle to form a vitta, and at sides; setæ dark brown.

Head convex, flattened in front, sparingly setigero-punctate. Rostrum excavate, external ridges prominent, convergent basally; internal ridges long, convergent; lateral sulci long, deep; median area sulciform, depressed throughout. Scrobes open posteriorly. Eyes small, subrotundate. Prothorax (3.5 × 4 mm.) subcylindrical, very little widened at the sides, apex with a feeble postocular sinuosity, disc with a deep median channel; granules small, irregular, longitudinally confluent, leaving spaces free from granules, towards and on sides more regularly granulate. Elytra (9 × 5.5 mm.) widest behind middle, apex moderately produced, rounded, base feebly arcuate, humeral angles with a small granulate nodule: disc and sides with rows of irregular foveæ or large punctures, intervening ridges prominent and granulate; interstices irregular, granulate, the whole sculpture more or less confused, granules depressed not shining, more thickly set along third interstice. Beneath, intermediates long; fifth segment with a feeble shallow impression at apex. Tibiæ simple, femora without ridges. *Dimensions*: ♂, 14 × 5.5 mm.

Hab.—N.S. Wales: Mudgee (— Stephen, per H. J. Carter).

Close to *T. papulosus*, of which, perhaps, it is only a well-marked variety. Apart from the difference in size, *T. vermicollis* appears to differ in the colour of its clothing, in the prothoracic granules more confluent along the median line, in the rather more deeply foveate elytral sculpture, with less obvious granules, in lacking the excavation of the apical ventral segment, and in the colour of the median vitta.

TALAUINUS ILLIDGEI, n.sp.

(Plate iii., fig. 10.)

♂. Elongate-ovate. Black; densely clothed, head with grey, a dark brown patch on either side of middle line, pro-

thorax mainly with brown, trivittate with grey on disc, elytra closely clothed with grey and with symmetrical black felt-like patches, three along second stria, separated by even distances less than the length of the patches, the last patch on declivity, fifth stria with a narrow longitudinal patch continuous from middle down declivity, interrupted anterior to middle; beneath each segment feebly maculate with greyish.

Head convex, feebly flattened in front, much in the same plane as rostrum, sparingly setose. Rostrum rather narrow, separated from head by a slight constriction, deeply excavate in front: external ridges subparallel, slightly constricted about middle; internal equally prominent but narrower than external, median area deeply sunken in front, continued as a narrowing sulcus to base; sublateral sulci moderately deep, foveiform. Scrobes deep, communicating behind with a second fossa extending to, and in front of, eye. Eyes subrotundate. Scape long. Prothorax (4×4.5 mm.) not greatly ampliate, postocular sinuosity fairly deep, disc with a well-defined, sub-apical, transverse constriction, most marked at sides; median line evidently though not deeply impressed; setigero-granulate, granules small, obscured by clothing, somewhat irregular in distribution, absent along median line; sides only granulate above. Elytra (10×6.5 mm.) gradually widened on sides, apex rounded, feebly mucronate, base moderately deeply arcuate, humeral angles prominent, slightly out-turned; disc with regular rows of punctures or small foveæ, slightly transverse, the ridges between not raised; interstices raised, fourth and sixth less prominent, setigerous in single series, duplicated in middle of second and third, the more lateral interstices shewing evidences of granulation; setæ long, brownish; sides foveostriate, middle interstice with a row of granules along either side. Intermediates long, fifth with a feeble median impression bounded on each side by two small elevations hardly tubercles, the posterior pair closer together. Anterior femora strongly ridged beneath in outer half; tibiæ simple. *Dimensions*: ♂, 15×6.5 mm.

Hab.—Queensland: Brisbane (R. Illidge).

There is a pair in the Queensland Museum collection, which I must refer to this species; the male, however, has the first pair of tubercles, on the fifth ventral segment, more marked, and the more posterior pair practically absent; the female is more robust, and convex beneath, without impressions.

I have much pleasure in dedicating this fine species to Mr. R. Illidge, to whose generosity I am indebted for my specimen.

TALaurINUS PALLIDUS MacL., *loc. cit.*, p. 223.

Elongate, subparallel. Black; densely clothed with brownish scales interspersed with yellowish-grey, almost white, scales, trivittate on prothorax and on elytra, irregularly disposed, forming a longitudinal band near sides, also on sides and legs; beneath, with a broad, tawny band of scales.

Head strongly convex, separated from rostrum by a well defined sulcus. Rostrum short, thick, external ridges subparallel, internal long, more prominent at base than the external; median area depressed, linear, lateral sulci rather shallow. Scrobes simple. Eyes large, subrotundate. Prothorax (4.5 × 5.5 mm.) evenly rounded on sides, apex with a moderately deep postocular sinuosity, but the lobes not prominent; disc with a definite transverse collar-impression above; disc with small, round, rather scattered granules, smaller and more obsolete in centre. Elytra (10.5 × 6 mm.) oblongate, sides very little widened posteriorly, almost parallel, base moderately arcuate, humeral angles advanced, but not prominent; disc with well defined rows of punctures; interstices not raised, except third and sixth slightly, second with one or no granules on disc, and one or two at apex; third with five small distant granules on disc, and three to four on declivity; fifth with a few on humeral angle, and four or five above and on declivity; sixth and seventh with about fourteen closely set, more prominent granules, the seventh quite on the side; sides punctato-striate. Intermediate ventral segments long; fifth segment

without impression. Anterior femora strongly ridged below in outer half; intermediate tibiæ with a deep, subapical notch.

♀. The type (♀.) differs from the male described above in being uniformly clothed with dirty grey scales; on the elytra, the third interstice has seven granules, small, round, unevenly and distantly spaced; and one on declivity on one side; the sixth is regularly and closely granulate; beneath, the fifth ventral segment has a punctiform depression. *Dimensions*: ♂, 16 × 6; ♀, 17 × 7; P., 5 × 6; E., 11 × 7 mm.

Hab.—Queensland (Type in the Australian Museum), Duaringa.

The elytral sculpture in this species may be taken, with modifications, as characteristic of a group of closely allied forms; the punctures are in rows, but hardly striate; each puncture is subtended by a small setigerous granule; the interstices are not raised, but, on the second, third, and fourth are set small, elongate, distant tubercles; the fifth is evident at the shoulder, but becomes much less definite posteriorly; the sixth is composed of closely set tubercles. Some of the species are extremely close, but differ in the rostrum, and in the presence or absence of the anterior femoral ridge, or of the subapical tibial notch.

TALAUINUS GAYNDAHENSIS, n.sp.

(Plate ii., fig. 8.)

♂. Facies that of *T. pallidus* Macl. Black densely clothed with brownish scales interspersed with grey, prothorax feebly trivittate, elytra vittate near sides; setæ dark brown.

Head convex, densely clothed, setigero-punctate. Rostrum separated from head, shallowly excavate, external ridges convex in profile, slightly divergent basally; internal low, practically obsolete; median area sublævigata, broad, not raised; lateral sulci shallow. Scrobes curved, open posteriorly. Scape rather more slender than in *T. pallidus*. Prothorax (4.5 × 5 mm.) rounded on sides, apex rounded above with definite ocular lobes; disc convex without an apical impression, set

with small rounded granules, not contiguous, smaller, somewhat obsolete along median and lateral vittæ. Elytra (10 × 6 mm.) very little widened posteriorly, apex rounded, base gently arcuate, humeral angles noduliform; disc punctato-striate, punctures small, each subtended above by a fine depressed setigerous granule; interstices hardly raised, with small, shining, oblong, distant granules or tubercles; second with four or five extending from middle to apex, third with eight distantly spaced along the whole interstice, fifth with humeral granules followed by a row of setæ, becoming feebly setigero-granulate posteriorly, sixth and seventh evenly and closely granulate in single series, sixth forming lateral border; sides punctato-striate, interstices granulate. Beneath, ventral segments convex, flattened in centre along vitta; median vitta golden-brown, extending from metasternum to apex, more spread out on apical segment; sides of segments sparingly setose; fifth without impressions. Anterior femora without ridge on under-surface; intermediate tibiæ notched, notch feebler and spines smaller than in *T. pallidus*. *Dimensions*: ♂, 15 × 6 mm.

Hab.—Queensland: Gayndah. Type in Australian Museum.

Closely allied to *T. pallidus*, but distinguished by the feeble internal rostral ridges, and by the absence of the ridge on the under surface of the anterior femora. From the description of *S. meliceps*, it differs in the colour of the setæ, "late ochraceis" in *S. meliceps*: and apparently in the elytral granules.

TALAUINUS SPHÆRULATUS, Macl., *loc. cit.*, p. 235.

Unfortunately I can find no insect under the above name in either the Macleay or Australian Museums. In the latter collection, under the label of *T. pallidus*, there are two specimens belonging to two species, one agreeing with the description of *T. pallidus*, and the other appearing to correspond so closely with the diagnosis of *T. spherulatus*, that I consider it to be, in all probability, the missing type; the detailed description is given below.

♂. Elliptical-elongate. Black, densely clothed with cinereous, below with a median vitta of golden-brown; setæ dark (almost black from some directions).

Head convex, separately so from rostrum, densely clothed. Rostrum short, little excavate; externally the ridges strongly convex in profile, most marked basally, separated from head by a prolongation downwards of the basal sulcus; as viewed from the front, ridges sinuate outwardly in centre, and incurved at base; internal ridges well defined but not prominent, median area little depressed, lateral sulci shallow. Prothorax (4.5×5.5 mm.) rather strongly rounded on sides, apex with an open postocular sinuosity, lobes not prominent, disc with a definite transverse collar-constriction, closely set with small round granules, smaller in centre, larger and fewer along constriction. Elytra (12×7 mm.) gradually widened posteriorly, apex rounded, base feebly arcuate, humeral angles marked but not produced; disc punctato-striate, punctures small, open, each subtended above by a small setigerous granule; interstices with narrow, elongate setigerous granules or tubercles, second with five or six not reaching base, but extending down the declivity; third with a more continuous line of fourteen or fifteen extending from base to apex; fourth with four to six; fifth with fine, rounded granules, definite at humeral angle, but becoming progressively smaller posteriorly; six with fifteen elongate granules closely placed, forming lateral border; sides with interstices obsoletely granulate. Fifth ventral segment with a moderately deep quadrate impression. Anterior femora without a ridge beneath; intermediate tibiæ not notched. *Dimensions*: ♂, 18×7 mm.

Hab.—(?) Queensland.

Separated from *T. pallidus* and *T. Gayndahensis* by the absence of the subapical notch on the intermediate tibiæ.

TALAUINUS PARALLELUS, Macl., *loc. cit.*, p. 224.

(?). Elongate, subparallel, convex. Black, without clothing excepting a few grey squames in depressions; setæ yellow.

Head strongly convex. Rostrum short, little excavate; external ridges short, feebly sinuate, strongly convex in profile and raised in middle; internal obsolete, only in evidence at base, median area feebly raised in centre. Scrobes with an open secondary fossa. Eyes ovate. Prothorax (5×5.5) rounded on sides, apical sinuosity feeble, a faint median impression present; with small, round granules, closely placed, sides granulate. Elytra (12×6) subparallel, apex rounded, base feebly arcuate, humeral angles with a small granule; disc with small irregular depressions, or punctures, traceable in striae; interstices not raised but bearing small granules irregularly and singly placed at intervals, second with three, third with seven, fourth with five, fifth with a few very small ones at shoulder, sixth with twelve, more regularly and closely set; the transverse ridges between the punctures little prominent, each bearing a small setigerous granule; sides with regular rows of small granules. [Abdomen wanting.] *Dimensions*: 18×6 mm.)

Hab.—(?) Queensland. (Type in Australian Museum.)

A member of the *T. pallidus*-group, but little resembling the others; perhaps nearest to the species I regard as *T. sphaerulatus*. Most readily recognised by the curious and markedly convex external rostral ridges; and by its elongate, subparallel, convex form. The elytral derm is comparatively rough, the punctures being subtended by slight elevations; the granules or tubercles are small, and little raised. I believe the type in the Australian Museum to be the male; it is the only specimen I have ever seen and is without any evidence of locality.

Postscript (added 30th May, 1912).—A specimen of *T. tomentosus* (♀) was sent to Paris for comparison. In reply M. Lesne says: "Nous possédons le type (♂) du *Tal. tomentosus*, Boisd. Votre spécimen est bien plus robuste que ce type; mais il lui est absolument conforme quant à la vestiture, à la sculpture et à la conformation de la face dorsale du rostre."

EXPLANATION OF PLATES II.-III.

Plate ii.

- Fig. 1. — *Talaurinus claricornis*, n.sp.
 Fig. 2. — *Talaurinus sulciventris*, n.sp.
 Fig. 3. — *Talaurinus septentrionalis*, n.sp.
 Fig. 4. — *Talaurinus Carpentarie*, n.sp.
 Fig. 5. — *Talaurinus panduriformis*, n.sp.
 Fig. 6. — *Peritalaurinus macrocephalus*, n.sp.
 Fig. 7. — *Talaurinus variegatus* Macl., var. *Darlingensis*, n.var.
 Fig. 8. — *Talaurinus Gaydahensis*, n.sp.
 Fig. 9. — *Talaurinus prypnoides*, n.sp.
 Fig. 10. — *Talaurinus parvus*, n.sp.
 Fig. 11. — *Talaurinus foveipennis*, n.sp.
 Fig. 12. — *Talaurinus inconspicuus*, n.sp.
 Fig. 13. — *Talaurinus Megalongensis*, n.sp.
 Fig. 14. — *Sclerorhinella granuliceps*, n.sp.
 Fig. 15. — *Talaurinus costipennis*, n.sp.

(Figures about nat. size.)

Plate iii.

- Fig. 1. — *Talaurinus miliaris*, ns. p. ♂.
 Fig. 2. — *Talaurinus miliaris*, n.sp. ♀.
 Fig. 3. — *Talaurinus irroratus*, n.sp.
 Fig. 4. — *Talaurinus longipes*, n.sp.
 Fig. 5. — *Talaurinus tumulosus*, n.sp.
 Fig. 6. — *Talaurinus foveo-granulatus*, n.sp.
 Fig. 7. — *Talaurinus acutipennis*, n.sp.
 Fig. 8. — *Talaurinus mythitoides*, n.sp.
 Fig. 9. — *Talaurinus subvittatus*, n.sp.
 Fig. 10. — *Talaurinus Illidgei*, n.sp.
 Fig. 11. — *Talaurinus acromialis*, n.sp.
 Fig. 12. — *Talaurinus angularis*, n.sp.
 Fig. 13. — *Talaurinus sobrinus*, n.sp.
 Fig. 14. — *Talaurinus niveo-rivittatus*, n.sp.
 Fig. 15. — *Talaurinus Carteri*, n.sp.
 Fig. 16. — *Talaurinus fossulatus*, n.sp.
 Fig. 17. — *Talaurinus foveatus* Macl., var. *montanus*, n.var.

(Figures slightly enlarged.)